

## CLAIMS

What I claim is:

1. A decking system for placement on a subassembly, said decking system comprising:
  - a plurality of elongated tubular elements for placement in lateral interlocking engagement with each other transversely of and spanning the distance of the subassembly, each of said plurality of tubular elements having a top portion, a bottom portion, a first side wall, and a second side wall connecting said top portion with said bottom portion;
    - wherein said top portion extends laterally from said second sidewall beyond said first side wall, said top portion having formed thereon a downwardly extending longitudinal flange;
    - wherein said bottom portion extends laterally from said first sidewall beyond said second side wall, said bottom portion having formed thereon an upwardly extending longitudinal wall defining an upwardly opening channel adjacent and a ledge, said upwardly opening channel adapted to receive therein in watertight relation said downwardly extending longitudinal flange;
    - said ledge having formed therein a plurality of apertures proximate said upwardly extending longitudinal wall; and
  - a plurality of fasteners therethrough for engagement with the subassembly.
2. A decking system for placement on a subassembly, the subassembly having at least two spaced apart joists, said system comprising:
  - a plurality of elongated tubular elements for placement in lateral interlocking engagement with each other transversely of and spanning the distance between the joists, each of said plurality of elements having a top portion, a bottom portion, a first side wall, and a second side wall, said first and second side walls connecting said top and bottom portions;

wherein said top portion extends laterally from said second side wall beyond said first side wall, said top portion having formed thereon a downwardly extending longitudinal flange,

wherein said bottom portion extends laterally from said first side wall beyond said second side wall, said bottom portion having formed thereon an upwardly extending longitudinal wall defining an upwardly opening channel between said second side wall and said longitudinal wall;

said upwardly opening channel adapted to receive therein in watertight relation said downwardly extending longitudinal flange;

said ledge having formed therein at least one aperture proximate said upwardly extending longitudinal wall, said at least one aperture adapted for the insertion of fasteners therethrough for engagement with the joists;

wherein said flange is defined by elongated opposing flange walls each of said flange walls having a pair of spaced apart longitudinally extending ribs; and

wherein said second side wall and said longitudinal wall have a pair of cooperatively spaced apart longitudinally extending ribs adapted to engage said flange wall ribs and form a moisture seal there along.

3. The decking system as defined in claim 2 further comprising at least one internal wall extending between said top and bottom portion.

4. The decking system as defined in claim 3 further comprising a surface tread formed on the exterior of said top portion comprising a series of lands and crests, including parallel major and minor lands, said major lands overlying at least said first side wall and each internal wall and separated by major crests, said major crest having formed thereon said minor crests and minor lands.

5. The decking system as defined in claim 4 wherein said major crests include a pair of planar surfaces intermediate said major land and an adjacent minor land.
6. The decking system as defined in claim 5 wherein each of said plurality of elongated members is formed by extrusion from a material selected from the group including PVC, poly-ethelene-teriphathlate, and aluminum.
7. The decking system as defined in claim 2, wherein said construction element includes a plurality of spaced-apart holes formed in said fastening portion of said channel for accommodating passage of fasteners therethrough to a supporting structure.
8. The decking system as defined in claim 2, wherein said construction element includes a plurality of reinforcing ribs located between said side walls and interconnecting said top and bottom walls.
9. The decking system as defined in claim 2 comprising a plurality of interconnected modular construction elements assembled together on a supporting structure.
10. A decking system for placement on a subassembly, the subassembly having at least two spaced apart joists, said system comprising:
  - a plurality of elongated tubular elements for placement in lateral interlocking engagement with each other transversely of and spanning the distance between the joists;
  - each of said plurality of elements having
    - a top portion having a proximal end and a distal end;
    - a bottom portion having a proximal end and a distal end;
    - a first side wall connecting said proximal end of said bottom portion with said top portion; and

a second side wall connecting said distal end of said top portion with said bottom portion;

wherein said proximal end of said top portion extends laterally beyond said first side wall and has formed thereon a downwardly extending longitudinal flange;

wherein said distal end of said bottom portion extends laterally beyond said second side wall to form a ledge, wherein an upwardly extending longitudinal wall is attached to said distal end of said bottom portion between said second side wall and said ledge, said upwardly extending longitudinal wall defining an upwardly opening channel adjacent said second side wall adapted to receive therein in watertight relation said downwardly extending longitudinal flange;

said bottom portion having formed therein a plurality of apertures traversing said ledge, said apertures adapted for the insertion of fasteners therethrough for engagement with the joists; and,

a surface tread formed on the exterior of said top portion comprising a series of longitudinally extending lands and crests including parallel major and minor lands, said major lands overlying at least said first side wall and separated by major crests, said major crest having formed thereon said minor crests and minor lands.